**PHOTOGRAPHS** 

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## HISTORIC AMERICAN ENGINEERING RECORD

HAER UTAH 10-CIS.V, 1-

## DEWEY SUSPENSION BRIDGE HAER No. UT-79

Location:

Spanning the Colorado River adjacent to State Highway

128, Cisco Vicinity, Grand County, Utah

USGS Quad: Cisco, Utah UTM: 12/647393/4297060

Date of Construction:

1915-16

Type of Structure:

Suspension bridge

Use:

Originally used for vehicular passage across the Colorado River, presently accommodates pedestrian and

bicycle traffic only

Designer/Fabricator:

Midland Bridge Company

Freygong & Trocan, proprieters, Kansas City, Missouri

Owner:

State of Utah

Significance:

When constructed, the Dewey Bridge was the second longest suspension bridge west of the Mississippi River. It remains the longest suspension bridge in

the State of Utah.

Project Information:

This project is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. The HAER program is administered by the Historic American Buildings Survey/Historic American Engineering Record Division (HABS/HAER) of the National Park Service, Department of the Interior. Documentation of the Dewey Suspension Bridge is part of the National Park Service Roads and Bridges Project, conducted during the summer of 1993 under the co-sponsorship of HABS/HAER and the National Park Service Roads Program.

Christine L. Madrid, HAER Historian, 1993

## HISTORY

Construction on the Dewey Bridge began in November 1915, and the structure was completed the following year. Spanning the Colorado River, the bridge was intended to connect southeastern communities of Utah with towns in Colorado.

Plans for a bridge crossing the Grand River (now referred to as the Colorado River) at this point began as early as 1912, with commissioners estimating that a suspension bridge at this point would cost approximately "\$8,000 to \$10,000, not to exceed the latter amount." Plans were begun and funding options were explored at this time. Grand County Representative Hammond introduced a bill requesting an appropriation of \$10,000 to complete a suspension bridge between Moab and Cisco, but the bill was killed by the state legislature, which also declined ten other bills asking for roads and bridges. The house also refused to reimburse Grand County \$7,500 expended for the Green River bridge. Grand County decided to construct the Colorado River structure nevertheless, proposing a special tax and the issuance of bonds issued to raise \$15,000 and \$10,000, respectively. Residents of the county voted almost unanimously to approve the special issues. Under the terms, the county was financially responsible for any road or bridge construction it undertook within its boundaries.

In March 1913, the ferry which had transported residents of the area across the Colorado River ran into ice in the water. The ice ripped a hole in the bottom of the ferry, causing it to take on water and sink. Eventually the ferry was recovered and repaired. The incident did, however, make it obvious that a more reliable river crossing was critically needed.

Actual construction of the bridge did not begin until 1915. On 10 April, the county approved amended plans submitted by the Midland Bridge Company (with the most satisfactory bid) and issued a contract issued to the company. The total cost of the structure and the approaches was estimated at \$20,750 and the county intended for the work to be completed by 15 October of the same year. However, the bonds issued for the construction of the bridge had proven hard to sell due to World War I, and this delayed the project for more than a year. A representative of the Midland Bridge Company, D. J. Cavanagh, took over the county bonds in the sum of \$10,500 as partial payment for the bridge. The bonds were then sold to the company for par value and accrued interest. This allowed the construction to proceed.

<sup>&</sup>lt;sup>1</sup>"Cable Bridges Are Praticable," *Moab Grand Valley Times*, 23 February 1912.

<sup>&</sup>lt;sup>3</sup>"Dewey Bridge Bill is Killed by House," Moab Grand Valley Times, 14 March 1913.

<sup>3&</sup>quot;The Dewey Bridge, Second Largest Suspension Structure West of the Mississippi River," Moab Grand Valley Times, 2 June 1916.

<sup>&</sup>lt;sup>4</sup>"Dewey Ferry Sinks to Bottom of River," Moab Grand Valley Times, 14 March 1913.

<sup>&</sup>lt;sup>5</sup>"The Dewey Bridge, Second Largest Suspension Structure West of the Mississippi River."

The site for the bridge was to be selected by the county surveyor. The surveyor reported that the best crossing site was upstream from the two sites previously considered due to the presence of bedrock. The Midland Company agreed to guarantee the bridge for five years. The structure was planned to carry a weight of 12 tons and be 12' wide.

Construction began on 26 November 1915. A. J. Welday, acting foreman for Midland Bridge Company, obtained building materials from nearby Cisco. No details concerning the construction were located, but the structure was completed later in the year.

Residents of the area hailed the new bridge for providing the first easy access across the Colorado in the area. The bridge was decribed as being "in every way as satisfactory as a bridge having piers, and certainly it is more secure. The bridge has been so strongly anchored and braced that it does not swing, the wind or even heavy loads of live stock having no effect on it." The structure was the second largest suspension bridge west of the Mississippi River, the largest being the 660' Cameron Suspension Bridge [HAER No. AZ-34] over the Little Colorado river near Flagstaff, Arizona. This bridge was built for the Bureau of Indian Affairs in 1912 by the Midland Bridge Company, the same manufacturers of the Dewey span. The Dewey bridge was, and is, the longest single-span bridge in the state of Utah. The final cost of the bridge approached \$25,000, just slightly over previously estimated costs. A writer for the Moab Grand Valley Times praised the new structure:

Grand county is proud of the Dewey bridge, not alone because it is a wonderfully fine structure, but because it will remain a monument to the enterprise of her citizens for a lifetime.

The dedication of the bridge was a cause for great celebration among local residents. Commissioner V. P. Martin and Frank Graham, on behalf of the county, examined the bridge and the approach route. 10 About 70 people gathered on 15 April 1916 to attend a celebratory program and banquet. Thomas E. Kitsen of Cisco provided an account of the event:

About 70 people assembled at midday and after all had crossed singly and gotten together on the north side, all turned their teams southward and with out families and neighbors loaded in our wagons we re-crossed the bridge, having seven wagons, two people on horseback and several walking on the bridge at one time. After this test of its strength and great efficiency, of which all felt very sure before venturing on in such a body, nothing but worlds of praise and gratitude could be heard. At about this time all were called to the cosey school house that stood

<sup>&</sup>lt;sup>6</sup>"Bridge Will Be Built by October 15," Moab Grand Valley Times, 16 April 1915.

<sup>&</sup>quot;Started Work This Morning On Bridge," Moab Grand Valley Times, 26 November 1915.

<sup>&</sup>lt;sup>8</sup>"The Dewey Bridge, Second Largest Suspension Structure West of the Mississippi River."

<sup>9</sup> Ibid.

<sup>10 &</sup>quot;Dedication of New Bridge at Dewey." Moab Grand Valley Times, 21 April 1916.

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nearby and proceeded to eat, drink and be merry. This was the order of things till sunrise the next morning. $^{11}$ 

The bridge has a 503.20' long deck, 10.6' wide. The south anchor tie point lies 163.26' away from the deck, while the north anchor tie point lies just 106.16' from the bridge itself. The Dewey Suspension Bridge was not constructed as planned. Initially designed to carry two lanes of traffic on a 12' wide roadway, the bridge was reduced to one lane of traffic on an 8' wide surface. Construction took less than five months.

The bridge contains 300,000 pounds of tungsten steel. Seven 1-1/4" cables support the structure on each side. The lumber used for the bridge, including that in the trusses, was cut and bored off-site and transported to the area. The materials were prefabricated and did not require any alterations on site.

<sup>11</sup> Ibid.

## BIBLIOGRAPHY

- "Bridge Will Be Built by October 15." Moab Grand Valley Times, 16 April 1915.
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- "Dewey Ferry Sinks to Bottom of River." Moab Grand Valley Times, 14 March 1913.
- "Started Work This Morning On Bridge." Moab Grand Valley Times, 26 November 1915.

ADDENDUM TO
DEWEY BRIDGE (Dewey Suspension Bridge)
Spanning Colorado River adjacent to State Highway 128
Cisco Vicinity
Grand County
Utah

HAER NO. UT-79

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